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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,956	11/13/2001	Manuel Barbosa	11017-0006	6385

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EXAMINER

NGUYEN, XUAN LAN T

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 12/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,956

Applicant(s)

BARBOSA, MANUEL

Examiner

Lan Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 02 November 2003 is: a) ☐ approved b) ☒ disapproved by the Examiner
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The proposed figures 1 and 3, submitted on 11/02/03, are not approved because figure 3 lacks the showing of lever 10.
2. It is noted that the Applicant fails to respond to the drawing objections in the Office Action dated 5/6/03. The same objections are repeated below for Applicant's convenience.
3. The corrected or substitute drawings were received on 2/20/03. These drawings are not approved. The followings are objections to the submitted drawings:
 - Numeral references 18, 20, 50 and 44 point the wrong parts.
 - Figure 1 is confusing due to the inconsistency in the use of the phantom lines and the solid lines to indicate the locations of the parts. For example, portions of rods 32, 34 are behind lever ends 36, 38. However, they are not illustrated with phantom lines. The Examiner urges the Applicant to carefully review both Figures 1 and 2 and to correct this deficiency.
 - Moreover, in figure 2, the phantom lines are used to indicate movement of the levers. However, there is no explanation to these phantom lines in the specification.
 - Figure 1 shows spring 28 connecting the ends of shoes 8 and not the levers 10 as described in page 4, lines 5, 6 of paragraph 16.

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4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: "F" and "A" in figure 2.

5. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 4, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Spiller et al.

Re: claim 1, Spiller et al. show a dual leading-shoe brake system, as in the present invention, comprising: a backing plate 10; first and second actuating levers 51, 51 arranged for radial moment and first and second brake shoes B, B; each brake shoe engaging a respective one of said actuating levers such that said actuating levers urge said brake shoes radially outward during braking operation, as shown in figure 1, a first anchor 15 fixed to said backing plate and engaging first ends of said actuating levers and adapted to engage a first end of a said brake shoe during braking, a second anchor

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16 adapted to engage a second end of said a brake shoe during braking, and an activating element C engaging second ends of said levers and adapted to urge said levers apart during braking, see page 4, first column, lines 6-16 and 63-72.

Re: claim 4, Spiller further shows first and second pins 79, 79, each of said pins connecting a respective one of said first and second levers to a respective one of said first and second brake shoes.

Re: claim 7, Spiller et al. show a dual leading-shoe drum brake system, as in the present invention, comprising: a backing plate 10; an upper anchor 16 secured to an upper part of said backing plate; a lower anchor 15 secured to a lower part of said backing plate; first and second 51, 51 substantially identical actuating levers arranged symmetrically with respect to a line between said upper and lower anchors for radial movement and engaging said lower anchor, as shown in figure 1; first and second B, B substantially identical brake shoes, each of said brake shoes being located adjacent a respective one of said actuating levers and adapted to be activated by said lever; wherein said brake shoes selectively engage said upper and lower anchors to transfer braking forces during braking, see page 4, first column, lines 6-16 and 63-72; and an actuating cylinder C engaging upper ends of said actuating levers to urge said levers apart and initiate said braking.

Re: claim 8, Spiller further shows an adjustment link 97, 98 extending between said first and second actuating levers.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2, 3, 5, 6 and 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spiller et al. in view of Yamamoto.

Re: claims 2 and 3, Spiller's brake system, as rejected in claim 1, lacks an adjuster of variable length and a parking brake lever as claimed in claims 2 and 3. Yamamoto teaches an automatic adjuster link of variable length 88, 26 and a parking brake lever 30 pivotally attached to a web 62 of shoe 18 and engaging said adjuster such that pivotal motion of said parking brake lever applies a separating force to said adjuster and to said web 62 as described in the Abstract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Spiller's brake system with an automatic adjuster link of variable length and a parking brake lever such as taught by Yamamoto in order to automatically adjusting the brake shoes according to brake lining wear levels and to utilize the same brake system as a service brake and a parking brake. Since automatically adjusting the shoes would increase the effectiveness of the brake system and saving time for the driver from having to manually adjusting said shoes; and utilizing the same service brake system as a parking brake would save the cost of making a vehicle. Furthermore, Yamamoto's adjuster and parking brake lever work together so that when the parking brake lever is

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actuated, the adjuster is actuated at the same time to adjust for brake wear, which adds even more convenience to the driver.

Re: claims 10 and 11, Spiller's brake system lacks a block as said first anchor. Yamamoto teaches a block 20 as a first anchor for the webs 62, 52 wherein said first anchor is secured to the backing plate by rivets, as shown in figure 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Spiller's brake system to have one common block as a first anchor in order to simplify the design at the same time reducing the cost of making the brake system as taught by Yamamoto.

Re: claims 5 and 6, Spiller et al. show a brake system, as in the present invention, comprising: first and second actuating levers 51, 51 arranged for radial movement to actuate respective brake shoes B, B. Spiller lacks a link extending between respective ends of said levers, and a parking brake lever pivotally attached to one of said actuating levers at a pivotal connection and also engaging one end of said link such that pivotal movement of said parking brake lever applies a force to said one of said actuating levers through said pivot connection and to the other of said actuating levers through said link. Yamamoto teaches an automatic adjuster link of variable length 88, 26 and a parking brake lever 30 pivotally attached to a web 62 of shoe 18 and engaging said adjuster such that pivotal motion of said parking brake lever applies a separating force to said adjuster to web 52 and another force to said web 62 by the pivotal connection 66 as described in the Abstract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Spiller's

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brake system with an automatic adjuster link of variable length and a parking brake lever such as taught by Yamamoto in order to automatically adjusting the brake shoes according to brake lining wear levels and to utilize the same brake system as a service brake and a parking brake. Since automatically adjusting the shoes would increase the effectiveness of the brake system and saving time for the driver from having to manually adjusting said shoes; and utilizing the same service brake system as a parking brake would save the cost of making a vehicle. Furthermore, Yamamoto's adjuster and parking brake lever work together so that when the parking brake lever is actuated, the adjuster is actuated at the same time to adjust for brake wear, which adds even more convenience to the driver.

Re: claim 9, Spiller's brake system, as rejected in claims 7 and 8, lacks a parking brake lever as claimed. Yamamoto teaches a parking brake lever 30 pivotally attached to a web 62 of shoe 18 to utilize the same brake system for both service braking and parking braking. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Spiller's brake system with a parking brake lever such as taught by Yamamoto in order to utilize the same brake system as a service brake and a parking brake in order to save the cost of making a vehicle as compared to having separate service and parking brake systems. As modified, Spiller's parking brake lever would engage the adjustment link 97, 98 via the actuating lever 51.

Re: claims 12 and 13, Spiller's brake system lacks a block as said first anchor. Yamamoto teaches a block 20 as a first anchor for the webs 62, 52 wherein said first anchor is secured to the backing plate by rivets, as shown in figure 1. It would have

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been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Spiller's brake system to have one common block as a first anchor in order to simplify the design at the same time reducing the cost of making the brake system as taught by Yamamoto.

Response to Arguments

10. Applicant's arguments, in the amendment filed on 11/2/03, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Spiller and Yamamoto.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is 703-308-8347. The examiner can normally be reached on M-F, 8 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-4177.

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A handwritten signature in cursive script, appearing to read "Lan Nguyen".

Patent Examiner
A. U. 3683
December 19, 2003